BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Examine the Commission's post-2005 Energy Efficiency Policies, Programs, Evaluation, Measurement and Verification, and Related Issues.	Rulemaking 06-04-010 (Filed April 13, 2006)

RESPONSE OF THE DIVISION OF RATEPAYER ADVOCATES TO AMENDED PETITION FOR MODIFICATION OF DECISION 07-09-043 BY PACIFIC GAS AND ELECTRIC COMPANY, SOUTHERN CALIFORNIA EDISON COMPANY, SAN DIEGO GAS & ELECTRIC COMPANY AND SOUTHERN CALIFORNIA GAS COMPANY

I. INTRODUCTION

Pursuant to Rule 16.4 of the Commission's Rules of Practice and Procedure, the Division of Ratepayer Advocates (DRA) submits this response to the petition of Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas)[1] to modify Decision (D.) 07-09-043. The petition for modification of D.07-07-043 (PFM), filed October 31 and subsequently amended on November 7[2] seeks to "clarify and modify how the results of the *ex post* measurement and verification studies to be completed in 2010 will be applied in the context of the Commission's newly adopted energy efficiency risk/reward mechanism" and to "permit predictable earnings (or penalties) from energy efficiency programs that can be valued by the investment

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[1] DRA's response to the petition for modification refers collectively to PG&E, SCE, SDG&E and SoCalGas as "Utilities."

[2] Administrative Law Judge (ALJ) Meg Gottstein issued a ruling on November 13, 2007 that retained the initial due for filing responses, notwithstanding the amendment to the October 31, 2007 Petition for Modification.

community."[3] The Utilities contend that these changes are needed to "increase the ability of the decision to make energy efficiency a core part of the utility business."[4]

DRA disagrees that the relief requested by the Amended PFM is merely a "clarification" or slight modification of the application of *ex post* measurements of energy efficiency savings. If granted, the requested relief would significantly shift the Commission's risk/reward incentive in favor of utility shareholders by effectively lowering the threshold at which utility shareholders can earn incentives on energy efficiency savings. Granting the requested relief would allow shareholders to earn 9% of net energy efficiency savings, as long as the Utilities' *ex post* energy efficiency savings exceeded 65% of the Commission's energy efficiency goals rather than 80 to 85% of those goals, as envisioned by D.07-09-043.

DRA likewise disagrees that the relief requested is necessary to allow the Utilities to "reduce the likelihood that interim earnings will have to be paid back and increase the certainty of recognition of any earnings by the investor community."[5] The Utilities could employ less drastic means to achieve similar results without overhauling the risk/reward mechanism a mere three months after its adoption. For example, they could be more conservative in booking expected earnings and/or use interim evaluation, measurement and verification (EM&V) results to revise the e*x ante* values when calculating the interim shareholder incentive payments.

DRA urges the Commission to deny the Amended PFM. Revising D.07-09-043 as requested would undermine the balance struck by that decision and skew the possibility of rewards in favor of shareholders. If the Commission is inclined nevertheless to grant the relief requested in the Amended PFM, it should also revise the shared savings rate downward to reflect the substantially lower risk that the Utilities would face.

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[3] Amended PFM, p. 1.

[4] *Id.*

[5] Amended PFM. p. 2.

II. DISCUSSION

A. The shareholder incentive mechanism created by D.07-09-043 was designed to promote energy efficiency as a resource by providing the utilities with the opportunity to earn significant incentives for successful pursuit of the Commission's energy efficiency goals.

D.07-09-043 recognized the importance of energy efficiency as a resource for meeting California's energy needs by crafting a risk/reward mechanism designed to align the interests of shareholders and ratepayers in pursuing energy efficiency. The Commission announced its intent to adopt a risk/reward mechanism that would provide utility shareholders "a meaningful opportunity to earn"[6] incentives. The adopted mechanism includes the following features in order to promote energy efficiency as a resource, while at the same time balancing the interests of shareholders and ratepayers:

> "[E]arnings begin to accrue only as the utilities reach to meet and surpass the Commission's kWh, kW and therm savings goals."
>
> "Earnings are greatest when performance is superior, not just 'expected.'"
>
> "All calculations of the net benefits and kW, kWh and therm achievements are independently verified by the Commission's Energy Division and its evaluation, measurement and verification (EM&V) contractors, based on adopted EM&V protocols."[7]

The shareholder risk/reward incentive mechanism provides that shareholders will begin earning incentives when energy efficiency programs

[6] D.07-09-043, p. 4 (emphasis deleted.).

[7] D.07-09-043, p. 4. These three aspects of the shareholder incentive mechanism were among nine that the Commission adopted (emphasis in original).

meet at least 80-85% of the goals established by the Commission in D.04-09-060.[8] The threshold for achieving incentives is the "minimum performance standard," or MPS. Utility shareholders will receive 9% of the energy efficiency net benefits if Utilities reached the MPS. Shareholders will receive 12% of the net benefits for achieving 100% of the Commission's energy efficiency goals. For performance between 65% and 80-85% of the goals, the incentive mechanism contains a deadband in which neither rewards nor penalties will accrue. The incentive mechanism penalizes performance below 65% of the relevant goals.[9]

D.07-09-043 provides for interim incentive payouts to the Utilities during their three-year energy efficiency program cycle. Two interim claims or "progress payments" will reflect expected earnings, followed by one "final true-up claim after the program cycle is completed."[10] D.07-09-043 therefore allows the Utilities to earn incentives during the program cycle using verified measure installations and costs and forecasted demand reduction and energy impacts results. These results will be trued up after the final EM&V to determine actual demand reduction and energy savings. To guard against the possibility that actual savings may be lower than forecasted, the incentive mechanism includes a 30% hold back of incentives and allows "deducting any over-collections from future claims..."[11]

Thus, D.07-09-043 designed a mechanism to promote energy efficiency as the resource of choice by striking a balance between shareholder and ratepayer interests. DRA and other ratepayer advocates argued for a lower

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[8] The Commission established three types of goals: kilowatts (kW), kilowatt hours (kWh), and therms. Utilities with more than one goal would need to reach an average of 85% for each of their applicable metrics, with no single metric falling below 80%. SoCalGas would only have one goal to meet, so it would need to achieve at least 80% of the therms goal established by the Commission.

[9] D.07-09-043, pp. 5-6.

[10] D.07-09-043, p. 12.

[11] D.07-09-043, Finding of Fact 110, p. 200.

incentive rate than the one the Commission ultimately chose, but the 9% sharing rate was premised on achievement of 80-85% of the Commission's energy efficiency goals. Not content with generous earnings opportunities presented by the mechanism, the Utilities have returned to request a modification that would lessen significantly the risk they face in pursuing energy efficiency incentives.

B. The Amended PFM would effectively lower the MPS to just over 65% of the Commission's goals and therefore undermine the effectiveness of the mechanism to motivate superior performance.

The incentive mechanism now allows the Utilities, other than SoCalGas, to earn incentives at the rate of 9% of energy efficiency net benefits if they achieve at least 80% of each of the applicable Commission-adopted savings goals, and achieve an average of 85% of their goals overall. SoCalGas is eligible for incentives if it meets at least 80% of its Commission-adopted goal.

The incentive mechanism now allows the Utilities to earn two progress payments during the program cycle, using verified installations and costs, and forecasted or *ex ante* energy savings and demand reduction numbers, subject to "true-up" of interim payments after the actual energy savings and demand reduction have been verified *ex post* following completion of the program cycle.

The Amended PFM seeks to change the incentive mechanism by effectively lowering the MPS to just over 65%. The Amended PFM would modify both the true-up process, and the MPS:

> "if the interim earnings claims, based on verified measure installations and costs and *ex ante* energy savings and demand reduction calculations, result in a utility meeting the 85% minimum performance standard for earnings (80% for SoCalGas), but the final true-up calculation, based upon *ex post* energy savings and demand reductions, results in that utility meeting less than 80% for any individual savings metric or less than 85% for the average savings threshold but greater than 65% of the Commissions goals, that utility will continue to achieve earnings at the 9% shared-savings rate.

> In addition, as long as a utility continues to exceed 65% of the savings goal threshold on an *ex post* basis, it will not be required to pay back any interim incentives earned."[12]

Thus, the Utilities propose that as long as they meet their MPS using verified installation measures and costs, they would continue to earn incentives at the 9% rate, even if the final EM&V revealed that in fact, energy savings and demand reduction were as low as 65.1% of the Commission's adopted goals. This effectively removes the established deadband, and would allow incentives for achieving less than 2/3 of the Commission's energy goals. In fact, it would allow Utilities to earn incentives for meeting an MPS lower than the ones they proposed during the proceedings that resulted in the incentive mechanism.[13] Rewarding the Utilities for achieving 65.1% of the Commission's goals would reward mediocrity rather than motivate superior performance. This would undermine the effectiveness of the incentive mechanism to as a tool to produce additional energy efficiency savings, thereby defeating the very purpose of the incentive mechanism.

C. Lowering the MPS because of difficulties in calculating *ex post* net-to-gross ratio would remove significant incentives for Utilities to implement effective energy efficiency programs.

The Amended PFM complains that "the single greatest risk in *ex post* measurements is the net-to-gross ratio."[14] The net-to-gross ratio or "NTG" ratio is "a measure of the percentage of energy efficiency savings that is directly attributable to a utility's energy efficiency program."[15] The NTG ratio therefore accounts for energy

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[12] Amended PFM, p. 3 (underlining omitted.)

[13] D.07-09-043, Attachment 3, p. 1. Sempra's proposed MPS was 80% average of CPUC target savings, with no single metric below 70%. PG&E's proposed MPS was each single metric at 70% of CPUC target, with an average at or above 80%. SCE's proposed MPS was greater than 80% pf the Commission's goals in each year, but 75% for 2006.

[14] Amended PFM, p. 6.

[15] *Id.*

efficiency measures that would have occurred even in the absence of a utility rebate or program. Energy savings that would have occurred even without utility programs are attributed to "free riders."

As the Utilities acknowledge, application of the NTG ratio to shareholder incentive calculations permits them to claim only those savings that result from Utility programs.[16] This in turn, motivates Utilities to direct energy efficiency dollars "to achieve results that would not otherwise have occurred" and should be a factor in determining what energy efficiency programs to pursue.[17]

Despite the acknowledged importance of targeting energy efficiency dollars to achieve the highest savings, the Utilities have been complaining about the application of NTG to energy efficiency savings since this summer. Preliminary EM&V results from 2004-2005 programs showed lower NTG ratios than anticipated,[18] with the result that less energy was saved as a result of their programs, and programs were less cost effective.[19] To address concerns about NTG measurement, the Commission convened a November 15, 2007 workshop to discuss potential improvements in NTG measurement. DRA agrees that development and use of the best possible tools to measure the NTG ratio are important, but it would be a mistake to lower the MPS merely because measurement of NTG is not an exact science. Freeridership exists, even if it is difficult to measure. Lowering the MPS to make it easier to accommodate the variability of NTG ratios would divert utility attention from savings that would otherwise be unattainable in the absence of the Utilities' programs.

[16] Amended PFM, p. 6.

[17] Amended PFM, p. 7.

[18] Although the Amended PFM implies that the lower than EM&V results came as a surprise, the Office of Ratepayer Advocates and TURN, and a report by consultant TecMarket Works, criticized the NTG values used by the Utilities in planning their 2006-2008 portfolios as unrealistically high. D.05-09-043, pp. 54-55.

[19] *See e.g.,* PG&E August 29, 2007 Comments on PD, pp. 4-5.

The Utilities have been on notice since September 2005 that *ex post* NTG ratios would be used to true-up energy efficiency savings[20] and they have been on notice for even longer that NTG ratios shift as a function of time, distribution channels, service territory and programs.[21] Instead, the response of PG&E has been to distribute even more compact fluorescent lights (CFLs) with little apparent regard for issues related to free riders and market transformation.[22]

Rather than changing the incentive mechanism only weeks after its adoption, the Utilities should be held accountable for program results within their control, including their portfolio mix and program design. As the Commission recognized earlier this month, "[o]ur fund shifting rules provide the utilities with a great deal of latitude to manage their authorized funding levels over the thee-year program cycle, in order to maximize the performance of their portfolios with respect to savings accomplishments and cost-effectiveness."[23]

The incentive mechanism is a powerful tool that should be used to minimize giveaways at the expense or ratepayers. If the Utilities continue to earn incentives the even if ex *post* EM&V shows that they have failed to make significant progress toward the Commission's energy efficiency goals, then the incentive mechanism will lose its effectiveness as a tool to achieve the Commission's energy efficiency goals.

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[20] September 2, 2005 Administrative Law Judge Ruling [in R.01-08-028] on EM&V Protocol Issues, Attachment 3 (NTG would be trued up with a final report at the end of the program cycle.)

[21] For example, an evaluation report of 2001 programs (CALMAC report # SDG 0218.01) shows many such changes in Table 2 in Attachment A of Appendix C1:Commercial lighting for SCE dropped from .95 in 1996 to .60 in 1997 (non-res DSM Bidding); Lighting in 1994 was 1.08 for PG&E, .8 for SDG&E, and 77 for SCE (CEEI); Industrial lighting for PG&E: 1995-97= .84, .67, .70 ,.75; Industrial HVAC for PG&E: 1994-96= .51, .73, .46. *See also* footnote 18.

[22] *See* October 4, 2007, San Francisco Chronicle article regarding Million Light Bulb Giveaway at http://www.sfgate.com/cgi-in/article.cgi?f=/c/a/2007/10/04/BUK0SJHBD.DTL&hw=light+bulb&sn=004&sc=646

[23] D.07-11-004, p. 8.

D. The Amended PFM criticizes the "significant cliffs" in the incentive mechanism, yet the proposed relief does not eliminate the cliffs, but only eliminates the deadband.

The Utilities cite the "tiered structure of the incentive mechanism [which] results in some significant cliffs, particularly between the 9% shared-savings rate incentive and the no-earnings deadband at 85% of the Commission's energy savings goals" in their background discussion explaining the basis for the PFM.[24] DRA's Comments on the PD adopting the incentive mechanism noted this very problem of sharp discontinuities in the incentive mechanism, and instead recommended elimination of the steps and the use of a continuous slope that would allow incentives and performance to be more closely correlated.[25] The Utilities proposal would do nothing to eliminate the "significant cliffs" in the incentive mechanism, but would instead replace the cliff between the deadband and the penalty zone with a cliff between the MPS and the penalty zone. If the Commission is inclined to revamp the risk/reward incentive mechanism, DRA's recommended exponential curve that allows earnings proportionate to every level of savings makes far more sense than dropping the MPS by 15-20 points.

E. The relief requested by the Amended PFM goes far beyond what is needed "reduce the likelihood that interim earnings will have to be paid back and increase the certainly of recognition of any earnings by the investor community."[26]

The Amended PFM cites concerns by the financial community regarding the possibility that interim earnings would need to be repaid as one of the primary motivators in seeking relief from the adopted incentive mechanism. A degree of uncertainly is inherent in any mechanism designed to provide the opportunity for earnings based on performance, rather than a guaranteed entitlement, especially if interim payouts are made

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[24] Amended PFM, p. 5.

[25] August 29, 2007, DRA Comments on Proposed Interim Opinion on Phase 1 Issues: Shareholder Risk/Reward Incentive Mechanism for Energy Efficiency Programs, p. 8 and illustrated as Alternative 1 in Figure 1B and detailed in Table 1B.

[26] Amended PFM, p. 2.

before final evaluation of program results. The Commission already acted to address that uncertainty in response to concerns raised by PG&E and others by holding back 30% of the interim claim amounts and allowing any over collections can be deducted from future earnings.[27]

Nevertheless, there are additional steps the Commission could encourage the Utilities to take to increase the certainty that the Utilities will be able to retain interim earnings. The Commission could clarify that the Utilities could use lower and more conservative estimates of demand reduction and energy reduction, including lower NTG values, in submitting their interim claim Advice Letters, first due "mid September" 2008. The alternative NTG ratio could be bounded by *ex ante* values and 2004-2005 *ex post* values. Lower, more conservative estimates would decrease the likelihood of the need to payback amounts later found to be unwarranted by *ex post* evaluation of actual energy savings.

The Commission could encourage the Utilities to use process evaluations to provide feedback on NTG during the cycle, so that they are not surprised by changes in forecasted numbers.

The Commission could encourage the utilities to rebalance their portfolios away from technologies with low NTG ratios in favor of energy efficiency measures that have not yet approached market transformation.

Finally, the Commission could consider increasing the holdback of interim payments from 30% to a higher number so that there is less likelihood that those payments would need to be returned.

These actions would allow the Utilities and the investment community greater confidence that the Utilities would be able to retain interim incentive payments, without revamping the incentive mechanism as requested by the Utilities.

[27] Although the Amended PFM expresses concern about "the likelihood that earnings will have to be paid back,". D.07-09-043, Finding of Fact 110, p. 200.

F. The Commission should deny the relief requested in the Amended PFM, but if the Commission is inclined to lower the MPS, it should lower the shared savings rate as well.

The issues of the Amended PFM are similar to those raised by the Utilities in their pleadings and testimony in Phase 1 of this proceeding, which the Commission fully considered in D.07-09-043. The Commission need look no further than D.07-09-043 to see some of the reasons why the Amended PFM should be denied.

D.07-09-043 observed that in today's procurement context, it is not enough for energy efficiency to produce positive net benefits to be considered a success. Instead, energy efficiency needs to produce "sizable GWh, MW and MTherm savings" on which resource planners can depend.[28] The Commission therefore adopted an "MPS [that] reflects our assessment of how sizable these savings must be before any earnings should be awarded."[29]

The Amended PFM requests a significant cut in the MPS to account for "uncertainties" in *ex post* -up of energy savings. Those "uncertainties" are neither new nor were they unknown when the Commission established the incentive mechanism. NTG measurement difficulties have existed for years, but the solution is not to ignore the issue of freeridership and market transformation, but to devise better measurement strategies, as evaluators are currently doing.[30]

Two of the *ex post* true-ups--per unit energy savings and peak demand reductions, measure whether energy and demand savings occurred as forecasted.[31] This goes to the heart of ensuring that energy efficiency produces real and not phantom savings.

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[28] D.07-09-043, p. 119.

[29] D.07-09-043, p. 119.

[30] At the November 15, 2007 NTG workshop, evaluators discussed brief, in-store interviews of customers who have purchased CFLs as one way to get more accurate information about whether an energy efficiency price reduction was a significant factor in the customer's decision to purchase a CFL.

[31] Thus, if forecasted estimates predict that customers will save energy based on anticipated use of a measure, but in reality, consumer behavior produces lower energy savings, then *ex post* EM&M allows correction of those estimates to reflect actual energy and demand savings.

Allowing the Utilities to meet an MPS of only 65.1% based on *ex post* savings, and to retain interim payments as long as they met this MPS, would create a perverse incentive similar to one that that the Commission considered in denying Utility requests not to true-up savings and net benefits based on the results of final load impact studies.[32] The absence of any true-up would create a perverse incentive for Utilities to over estimate savings assumption in the planning process, because Utilities would be able to retain progress payments based on inflated savings estimates. A similar incentive would operate if the Utilities knew that predicted savings could fall by as much as 20% without the need to return interim payments.

DRA, The Utility Reform Network, the Community Environmental Council and the California Large Energy Consumers Association were among the customer groups advocating for a shared savings rate of less than half of what the Commission ultimately adopted. The 9% shared savings rate included was premised on meeting an MPS of 80-85%, based on verified *ex post* energy savings. If the Commission is inclined to allow Utilities to earn incentives for meeting an MPS of 65.1% based on verified *ex post* energy savings, then it should maintain the balance of shareholder and ratepayer interests struck in D.07-09-043 by lowering the shared savings rate as well.

III. CONCLUSION

DRA respectfully requests that the Commission deny the Amended PFM. Less drastic means are available to address uncertainty related to whether the Utilities will be able to retain interim payments. If the Commission is inclined nevertheless to grant the requested relief, it should lower the shared savings rate to reflect the substantially lower risk that the Utilities would face under the revised shareholder risk/reward incentive mechanism.

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[32] D.07-09-04, p. 121.

Respectfully submitted,

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November 30, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of **RESPONSE OF THE DIVISION OF RATEPAYER ADVOCATES TO AMENDED PETITION FOR MODIFICATION OF DECISION 07-09-043 BY PACIFIC GAS AND ELECTRIC COMPANY, SOUTHERN CALIFORNIA EDISON COMPANY, SAN DIEGO GAS & ELECTRIC COMPANY AND SOUTHERN CALIFORNIA GAS COMPANY** in **R.06-04-010** by using the following service:

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Executed on November 30, 2007 at San Francisco, California.

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